And according to c there would be required :
for 1 per cent. P, 7-SO per cent. Fe30s . . (64).
3. Iran Peroxide and Manganese.
Manganese usually requires no oxygen from FegO,, since it!« capable of setting free the iron from the silicate and locate of iron formed from the silicon and phosphorus of Son as has already been shown on page 146 A chance excess of manganese must be eliminated according to the
formula:- +3Mn=3MnO+2Fe ^erefrom
1 per cent. Mn requires 0-97 per cent. Fe»0, . - (to).
4. Iron Peroxide and Carlon.
The estimation of the iron peroxide demand for carbon Alimination is difficult, owing to Si, P and Mn being present in L iron simultaneously with and in addition to carbon, and SOT can likewise be attacked, and that iron and manganese protoxides which are present in the products of their ehmination may be partly employed in the oxidation of the carbon. The amount of iron protoxide referred to is naturally dependent the Si P and Mn eontent of the metal> and therefore does not generally admit of being estimated. Nevertheless, an excess of carbon must be removed according to the formula:— FeA+3c=3CO+^e, Tvhouco
1 per cent. 0 requires 4-44 per cent. 1'oA, • • (60).
ft) ENEBGI CHANGES ACCOMPANYING THE ACTION or IEON PEROXIDE ON THE REDUCING AOKNTS IN IKON.
All chemical reactions are accompanied by energy changes, which are characteristic of their course. For knowledge of the events accompanying the action of iron peroxide on the reducing agents in iron it is, therefore, neeoHHary to ascertain the energy changes accompanying them. In order to render this possible the temperatures must be taken into account at which the action occurs, as also the Bpeciiic heats of the teagents and th,e products of the reaction* UH well as their